U.S. Application No. 10/625,934 Reply to Office Action mailed November 2, 2007 Amendment dated March 12, 2008

Amendments to the Claims:

This Listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1. (Currently amended) A <u>pharmaceutical</u> composition consisting essentially of the S enantiomer of equol (S-equol).
- 2. (Currently amended) The composition according to of Claim 1 wherein the composition is made by substantially isolating S-equol is substantially isolated from a racemic mixture of S-equol and R-equol.
- 3. Canceled.
- 4. (Currently amended) The composition according to Claim 2 1 wherein the isolated Sequol has an enantiomeric purity of 90% minimum enantiomeric excess (EE).
- 5. (Original) The composition according to Claim 4 wherein the S-equol has an enantiomeric purity of 96% minimum EE.

6-11. Canceled.

- 12. (Previously presented) A food composition comprising an additive component consisting essentially of the S-enantiomer of equol (S-equol).
- 13. (Previously presented) The food composition according to Claim 12, wherein the food comprises, per serving of food, at least about 1 mg, and up to about 300 mg, S-equol.
- 14. (Previously presented) The food composition according to Claim 12, wherein the food comprises, per serving of food, at least about 10 mg, and up to about 200 mg, S-equol.
- 15. (Previously presented) The food composition according to Claim 12, the additive further comprising R-equol, the food composition having a non-racemic ratio of S-equol and R-equol.
- 16. (Previously presented) A composition for topical application to skin, comprising equol consisting essentially of S-equol, and a vehicle.
- 17. (Previously presented) The composition according to Claim 16, comprising by weight at

U.S. Application No. 10/625,934 Reply to Office Action mailed November 2, 2007 Amendment dated March 12, 2008

least 0.1%, and up to 10%, of S-equol.

- 18. (Previously presented) The composition according to Claim 16 where the S-equol is conjugated at the C-4' or C-7 position to form a conjugate selected from the group consisting of glucuronide, sulfate, acetate, propionate, glucoside, acetyl-glucoside, malonyl-glucoside, and mixtures thereof.
- 19. (Previously presented) The composition according to Claim 16, further comprising Requol, the composition having a non-racemic ratio of S-equol and R-equol.

20-43. Canceled.

- 44. (Previously presented) The composition according to Claim 1 where the S-equol is conjugated at the C-4' or C-7 position to form a conjugate selected from the group consisting of glucuronide, sulfate, acetate, propionate, glucoside, acetyl-glucoside, malonyl-glucoside, and mixtures thereof.
- 45. (Previously presented) The food composition according to Claim 12 where the S-equol is conjugated at the C-4' or C-7 position to form a conjugate selected from the group consisting of glucuronide, sulfate, acetate, propionate, glucoside, acetyl-glucoside,

malonyl-glucoside, and mixtures thereof.

46-50. Canceled

- 51. (Currently amended) The composition of claim <u>50_1</u>, further comprising a pharmaceutically acceptable adjuvant, carrier, or excipient.
- 52. (New) A composition for oral consumption or topical application comprising S-equol, wherein the composition is substantially free of R-equol.
- 53. (New) The composition of claim 52, wherein the composition is a food product, a pharmaceutical, an over-the-counter (OTC) medicament, an ointment, a liquid, or a cream.
- 54. (New) A pharmaceutical composition comprising enantiomerically pure S-equol as an active agent.
- 55. (New) The composition of claim 54, further comprising a pharmaceutically acceptable adjuvant, carrier, or excipient.